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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,249	04/09/2001	Brandon Duncan	ARC920010027US1	7575
7590	01/28/2004		EXAMINER	
John L. Rogitz Rogitz & Associates 750 B. Street, Suite 3120 San Diego, CA 92101			BASOM, BLAINE T	
			ART UNIT	PAPER NUMBER
			2173	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/829,249	DUNCAN ET AL.
	Examiner	Art Unit
	Blaine Basom	2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 November 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 and 7-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 and 7-31 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) Other: _____

DETAILED ACTION

Response to Arguments

The Examiner acknowledges the Applicants' amendments to claims 1, 7-9, 11-13, 15, and 27, and the cancellation of claim 6. Regarding claim 1, the Applicants submit that device described by Oberteuffer (U.S. Patent No. 6,438,523) does not constitute an "electronic book," as was alleged by the Examiner in the previous Office Action. In response to such arguments, the recitation of an "electronic book" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Regardless, the Examiner maintains that Oberteuffer in fact discloses an electronic book. The Microsoft Computer Dictionary, fifth edition (see the attached Appendix), defines an electronic book (or e-book) as:

Format allowing books and other large texts to be downloaded from a Web site and viewed digitally. Typically, reading an electronic book requires using a small computer appliance that is about the size of a paperback book and consists of a display screen and basic controls. Users can bookmark, highlight, or annotate text, but rights management features may prevent users from e-mailing, printing, or otherwise sharing e-book contents.

Thus, as known in the art, an electronic book allows large texts to be downloaded, necessitates a small computer about the size of a book, and consists of a display screen and basic controls used to bookmark, highlight, or annotate text. Oberteuffer describes a computer system, whereby it is understood that this computer system allows large texts to be downloaded (for example, see

column 1, lines 18-28), may be a small computer about the size of a book (see column 2, lines 51-63), and may consist of a display screen and basic controls used to bookmark, highlight, or annotate text (for example, see column 5, lines 24-45). Consequently, it is understood that the computer system described by Oberteuffer may serve as an electronic book, as is defined in the art.

Further regarding claim 1, the Applicants argue that one of ordinary skill in the art would not have been motivated to combine the electronic book reference of Kono with the device described by Oberteuffer, which contains no content at all except whatever the user puts into it. Similarly, the Applicants further argue that the suggestion presented by the Examiner for combining Kono and Oberteuffer bears no relevance to Oberteuffer, since Oberteuffer does not seek to access content from anything. The Examiner respectfully disagrees with these arguments. Particularly, it is noted that the device of Oberteuffer is able to display content other than what the user put into it. For example, Oberteuffer discloses that the device may comprise web-browsing programs (see column 4, lines 17-27), which are interpreted to display web pages and the like. Thus the Examiner maintains that one of ordinary skill in the art would have in fact been motivated to combine the teachings of Kono and Oberteuffer, as suggested in the previous Office Action.

Additionally regarding claim 1, the Applicants submit that the specific correspondence between plural input modes and plural output modes, as expressed in claim 1, cannot be taught by the combined references of Kono and Oberteuffer, since neither envisions both a multi mode input and a multi mode output. The Examiner respectfully disagrees with this argument. Oberteuffer describes a multi mode input with a single mode output. As shown in the previous

Office Action and again below, Kono similarly describes a multi mode input, but with a multi mode output as well. Thus the Examiner maintains that the references of Oberteuffer and Kono, when combined, teach all of the features recited in claim 1. By the same reasoning, the Examiner maintains that the references of Oberteuffer and Kono, when combined, teach all of the features recited in claim 27.

Lastly, the Applicants argue that neither Oberteuffer or Kono teach maintaining a current position in content and/or a spanning region of the content being rendered such that first and second output threads are run simultaneously with each other, as has been added to claim 13. However, and for the reasons shown below in the rejection for claim 13, the Examiner maintains that the described combination of Oberteuffer and Kono in fact teaches maintaining a current position in content and/or a spanning region of the content being rendered such that first and second output threads are run simultaneously with each other.

Claim Objections

Claim 13 is objected to because it recites, “for each tangible interface the abstract interface stores information including a current position in content being rendered and/or a spanning region of the content being rendered.” As the use of the term “and/or” may render the claim indefinite, it is suggested that the claim be amended to instead recite, “for each tangible interface the abstract interface stores information including at least one of a current position being rendered and a spanning region of the content being rendered.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,438,523, which is attributed to Oberteuffer et al. (hereafter referred to as "Oberteuffer"), and also over U.S. Patent No. 5,914,707, which is attributed to Kono. In general, Oberteuffer presents a computer system which is capable of processing both speech input and hand-drawn input (see column 3, lines 10-28). This computer system responds to such inputs by graphically displaying text or graphics accordingly (for example, see column 5, lines 24-45). Lastly, it is interpreted that such a computer system may be implemented as a book-sized computer, i.e. an "electronic book device" (see column 2, lines 51-63).

Thus regarding claims 1, 2, and 4, Oberteuffer presents an electronic book device which comprises a portable housing and a processor, as is known in the art, and whereby the processor displays content stored in a storage device by responding to plural input modes. Specifically regarding claim 4, these input modes include a speech input mode and a hand-drawn input mode, or in other words, a sound input mode and a graphics input mode. The electronic book device of Oberteuffer subsequently comprises a "speech interface" and a "pen interface," whereby this speech interface includes an audio input device, specifically a microphone, and this pen interface includes a graphics input device, specifically an electronic pen (see column 4, lines 1-16). Therefore, it is understood that the electronic book of Oberteuffer implements at least a graphics

input mode and a sound input mode, whereby the electronic book includes at least one graphics input device and at least one audio input device, both sending input signals to the processor. It is further interpreted that the electronic book device of Oberteuffer implements a visual graphics output mode, whereby the electronic book comprises a visual display, which is responsive to the processor for outputting content (for example, see column 6, lines 2-23). Oberteuffer particularly discloses that the electronic book responds to the graphics input mode by outputting content using this graphics output mode. For example, in response to a user inputting a hand-drawn image, the processor of the electronic book responds by displaying a corresponding “clean” representation of the image (see column 4, lines 45-53). However, Oberteuffer does not explicitly disclose that the electronic book is capable of outputting content using *plural* output modes, wherein particularly, the processor responds to an audio input mode by outputting content in an audio output mode, as is expressed in claim 1. Oberteuffer consequently does not disclose that these plural output modes include at least visual graphics *and* sound, and that the electronic book includes a visual display *and* at least one audio speaker, both being responsive to the processor for outputting content, as is expressed in claim 2.

Like Oberteuffer, Kono discusses electronic books capable of inputting data graphically and orally, wherein these electronic books respond to such inputs by outputting text or graphics accordingly (for example, see column 1, lines 13-52). Moreover, and specifically regarding the claimed invention, Kono discloses that such an electronic book may output audio data as well as this graphical data (see column 3, lines 39-45). For example, audio speech may accompany displayed text (see column 7, lines 29-32). In order to do so, the electronic book comprises a speaker in order to output audio data (see column 5, lines 7-23). Kono thus presents an

electronic book which responds to input and is capable of outputting content using plural output modes, the plural output modes including at least visual graphics and sound, and wherein the device includes at least one visual display and at least one audio speaker, both being responsive to a processor for outputting content.

It would have therefore been obvious to one of ordinary skill in the art, having the teachings of Oberteuffer and Kono before him at the time the invention was made, to modify the electronic book device taught by Oberteuffer such that it also outputs content via an audio output mode, as is done by the electronic book device of Kono. It would have been advantageous to one of ordinary skill to utilize such a combination because audio output further enhances understanding of graphically displayed content, as is demonstrated by Kono. Regarding claim 1, Kono discloses that audio information is output in response to the selection of a particular “voice” icon (see column 7, lines 29-32). It is interpreted that with the electronic book of Oberteuffer and Kono, speech commands may be used to select such icons (for example, see column 4, lines 54-61 of Oberteuffer). Thus with a speech command being used to select a voice icon, the processor responds to an audio input mode by outputting content in an audio output mode using an audio user interface.

As per claim 3, Kono teaches that the electronic book is responsive to user input selecting an audio output mode. For example, Kono discloses that the electronic book outputs audio speech in response to the user selecting a particular icon (see column 7, lines 29-32). It is therefore understood that with the above-described combination of Oberteuffer and Kono, the processor of the electronic book is responsive to user input selecting an output mode.

In reference to claim 5, Oberteuffer teaches that the electronic book is responsive to user input selecting an input mode (see column 7, lines 10-24). It is therefore understood that with the above-described combination of Oberteuffer and Kono, the processor of the electronic book is responsive to user input selecting an input mode.

In regard to claim 13, the processor of the above-described electronic book of Oberteuffer and Kono is considered an “abstract interface,” like that of the claimed invention, wherein this processor is responsible for accessing content stored in the data storage of the electronic book as is known in the art. In addition, Oberteuffer discloses that the electronic book may receive commands via its audio user interface, whereby it updates its graphical user interface in response thereto (for example, see column 5, lines 57-65). Kono similarly teaches that the electronic book may receive commands via its graphical user interface, whereby it updates its audio user interface in response thereto. Specifically, it is understood that commands to change a graphically displayed page of a document may be entered via the graphical user interface, whereby the speech interface is updated in order to reflect the currently displayed page (see column 7, lines 29-39). It is therefore understood that the above-described electronic book taught by Oberteuffer and Kono comprises: content stored in a data storage; an abstract interface accessing the data storage; an audio user interface communicating with the abstract interface; and a graphics user interface communicating with the abstract interface, the abstract interface receiving user input commands from the audio user interface and updating the graphics user interface in response thereto, the abstract user interface receiving user input commands from the graphics user interface and updating the audio user interface in response thereto. The audio user interface and the graphics user interface taught by this combination of Oberteuffer and Kono

establish tangible interfaces, as the interfaces in which they establish are audibly and visually perceived by the user. Furthermore, Kono teaches that the electronic book may output both audio data and video data concurrently in response to user input relative to displayed data (see column 3, lines 39-45). Consequently, it is understood that the processor of the electronic book maintains information on the content being displayed, such that first and second output threads, corresponding to audio data and video data, are run simultaneously with each other. Kono further discloses that audio data and video data output by the electronic book is "synchronized" (for example, see column 4, lines 19-35). It is thus interpreted that, at particular positions, the audio output or video output of the electronic book will pause in order to coordinate the audio and video output. The audio user interface and the graphics user interface taught by this combination of Oberteuffer and Kono thus establish tangible interfaces, whereby for each tangible interface, the abstract interface, i.e. processor, stored information including a current position in content being rendered, such that first and second output threads are run simultaneously with each other, the abstract interface also determining positions at which tangible interfaces should pause when required to coordinate the multiple output modes.

In reference to claims 14 and 15, the electronic book of Oberteuffer and Kono includes a visual display associated with its graphics user interface and an audio speaker associated with its audio user interface, as is shown above in the rejection for claims 1, 2, and 4. Specifically, as is shown above, content is output in a graphics output mode using the graphics user interface, and content is output in an audio output mode using the audio user interface.

Regarding claims 7 and 16, Kono discloses that an electronic book may output both audio data and video data concurrently (see column 3, lines 39-45). Similarly, Oberteuffer discloses

that a user may enter data into an electronic book by simultaneous graphical and oral commands (for example, see column 4, lines 17-64; and column 5, lines 24-45). It is therefore understood that the audio user interface and the graphical user interface of above-described electronic book of Oberteuffer and Kono may run simultaneously with each other.

As per claims 8, 10, 11, 17, and 19, Oberteuffer discloses that the electronic book may receive annotations from a user-selected interface, wherein the annotations are associated with user-selected portions of content, and interpreted to be stored by the electronic book. Moreover, the other user interface is updated with the annotations. Oberteuffer specifically discloses that a user may enter annotations via a speech interface (see column 5, lines 24-45), which may be user-selected (see column 7, lines 11-24), and whereby the annotations are displayed via the graphical user interface and are associated with an “organizational structure” displayed by the graphical user interface (see column 5, lines 24-45). It is therefore understood that with the above-described combination of Oberteuffer and Kono, the electronic book’s processor receives for storage annotations from a user-selected user interface, wherein the annotations are associated with user-selected portions of content, and wherein the processor updates another user interface with the annotations.

Concerning claims 9, 12, 18, and 20, Kono teaches that a user may navigate through content via a user-selected user interface of the electronic book, wherein the other user interface is updated to reflect such navigation. For example, Kono discloses that a user may visually navigate, i.e. read, a displayed document, and wherein a voice icon associated with the current page may be selected in order to provide audio accompaniment of the displayed page (see column 7, lines 29-39). Thus a user may navigate through content via a graphical user interface,

wherein the audio user interface is updated to reflect the currently displayed page. It is therefore understood that with the above-described combination of Oberteuffer and Kono, the electronic book's processor is programmed to allow a user to navigate through content using a user-selected user interface to render a navigation result, whereby the processor updates another user interface with the navigation result.

With respect to claim 21, the above-described electronic book of Oberteuffer and Kono is considered a "computer program product" like that of the claimed invention, as it is understood that such an electronic book comprises a computer program storage device and computer-readable instructions on the storage device, as is known in the art (see also, column 8, line 46 – column 10, line 26 of Kono). Moreover, and for the reasons described above in the rejection for claims 1, 2, and 4, it is understood that these computer-readable instructions cause the electronic book to display electronic content in more than one mode. It is further understood that such instructions include computer-readable code means for receiving an annotation to content via an audio user interface, associating the annotation with the content, and displaying the annotation and the associated content using a graphical user interface, as is shown above in the rejection for claims 8, 10, 11, 17, and 19.

Referring to claim 22, Oberteuffer teaches that a user may add text to a memo using a graphical user interface (for example, see column 5, lines 58-65). It is therefore understood that the user may add annotations to the memo using the graphical user interface, whereby it is understood that the annotations are associated with the memo. Moreover, Kono teaches that a document, like this memo, may be reproduced using an audio user interface (see column 7, lines 29-39). It is therefore understood that the above-described electronic book of Oberteuffer and

Kono comprises: computer-readable code means for receiving an annotation to content via a graphical user interface; computer-readable code means for associating the annotation with the content; and computer-readable code means for displaying the annotation and associated content using an audio user interface.

Concerning claim 23, the above-described audio user interface and graphical user interface of the electronic book of Oberteuffer and Kono run simultaneously with each other, as is described above in the rejection for claims 7 and 16.

As per claims 24 and 26, the above-described electronic book of Oberteuffer and Kono is understood to comprise computer readable code means for allowing a user to navigate through the content using a user selected user interface in order to render a navigation result, whereby another user interface is updated with the navigation result, as is described above in the rejection for claims 9, 12, 18, and 20.

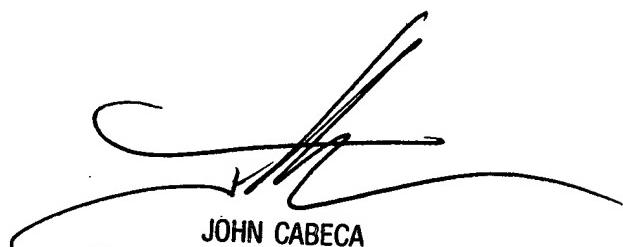
Regarding claim 25, the above-described electronic book of Oberteuffer and Kono is understood to comprise computer-readable code means for storing annotations from a user-selected user interface, whereby another user interface is updated with the annotations, as is described above in the rejection for claims 8, 10, 11, 17 and 19.

In regard to claims 27 and 28, the above-described electronic book of Oberteuffer and Kono is understood to teach a method for presenting content using an electronic book. In particular, and for the reasons described above in the rejection for claims 1, 2, and 4, it is understood that such a method comprises providing a portable housing having content electrically stored therein, and simultaneously implementing two modes of output for displaying the content, the modes of output being responsive to plural input modes. It is understood that

these modes of output, specifically a graphical user interface and audio user interface, are each implemented by a “thread,” as is known in the art.

Concerning claim 29, the above-described audio user interface and graphical user interface threads of the electronic book of Oberteuffer and Kono run simultaneously with each other, as is described above in the rejection for claims 7 and 16. Moreover, it is interpreted that these threads are at the same location in the content (for example, see column 7, lines 29-39 of Kono; the speech output thread and audio output thread are at the same page of a document).

In regard to claims 30 and 31, it is understood that each output thread is associated with a corresponding input mode, either a graphical input mode or an audio input mode, for inputting annotations and user commands, as is described above in the rejection for claim 6. As Oberteuffer teaches that such input modes may be switched in response to user commands (see column 7, lines 11-24), it is interpreted that the above-described electronic book of Oberteuffer and Kono is similarly responsive to user commands to switch from displaying content from displaying the content using the first output thread to displaying the content using the second output thread.



JOHN CABEZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2173

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (703) 305-7694. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7238.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

btb